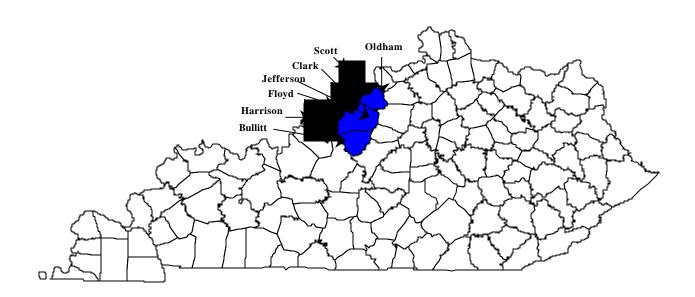
Kentucky Portion of the Louisville, KY-IN MSA



The Louisville, KY Metropolitan Statistical Area (MSA) was listed in 2001 as being the 50th largest MSA within the United States. This MSA encompasses seven counties, Scott, Clark, Floyd, and Harrison Counties, Indiana and Oldham, Jefferson, and Bullitt Counties, Kentucky.

BULLITT COUNTY, KENTUCKY

Bullitt County is part of the Louisville, KY-IN Metropolitan Statistical Area (MSA) and is on the I-65 South interstate corridor. It is located directly south of Jefferson County, southwest of Spencer County, northwest of Nelson County, and northeast of Hardin County.

Geography/Topography

Bullitt County has a land area of 299 square miles. The Ohio River touches the western county border. The county is geographically at the junction of the Outer Bluegrass and the Knobs Regions in north central Kentucky. The county is divided by the north-south I-75 interstate corridor.

Meteorological Information

Wind speed/wind direction information shows that the majority of the time for the period 1988-1992, the wind in the Bullitt County area came from the south-southwest and typically at 7-10 knots. (See figure 1-A) The mean high temperature for July for the area from 1961 through 1990 was 87?F and the mean low was 70?F. The mean precipitation for the same period was 4.3 inches.

Planning

The authority for air quality planning in the Bullitt County area resides with the Kentucky Environmental and Public Protection Cabinet. Transportation planning for Bullitt County is performed by the Kentuckiana Regional Planning and Development Agency (KIPDA) and the Kentucky Transportation Cabinet.

Air Monitoring

For the 2001 – 2003 monitoring period, the Bullitt County $PM_{2.5}$ monitor (21-029-0006) showed an annual average design value of 14.9 micrograms per cubic meter, which would be classified as a county in attainment of the $PM_{2.5}$ annual National Ambient Air Quality Standard (NAAQS) (15 micrograms per cubic meter). However, because $PM_{2.5}$ monitors in Jefferson County, Kentucky, and Clark and Floyd Counties in Indiana have a probable $PM_{2.5}$ design value exceeding the annual $PM_{2.5}$ standard, information for Bullitt County is being

presented in this document. The monitoring information for 2003 is complete for Bullitt County, Kentucky. However, the 2003 monitoring data reported for Jefferson County, Kentucky, and the Indiana counties is the latest available and is not complete through December 2003. (See table 1-A)

Population

Based on projections to 2002 from the 2000 census data, there are 63,800 persons living in Bullitt County. (See table 1-C) That represents approximately 213 persons per square mile. The population of Bullitt County is approximately 35.4% rural with 64.6% of the people living in incorporated areas. The largest cities in Bullitt County are Mt. Washington and Shepherdsville.

Bullitt County's population from 1990 through 2000 increased by approximately 28.7% (47,567 to 61,236). The population is further expected to increase by an additional 27.3% between 2000 and 2010. (See table 1-B)

Based on 2002 population data for the entire Louisville, KY-IN MSA, Bullitt County represents approximately 6.1% of the total 2002 population in the entire MSA and 7.9% of the Kentucky portion of the MSA. (See table 1-C)

Air Emissions

The emissions presented in this document are from the U.S. EPA's 1999 National Emission Inventory (NEI). In addition, the $PM_{2.5}$ emissions provided in this document are for primary $PM_{2.5}$ from the 1999 NEI. Primary $PM_{2.5}$, is directly emitted from a stack or an open source and includes filterable and condensible particles.

Point Sources

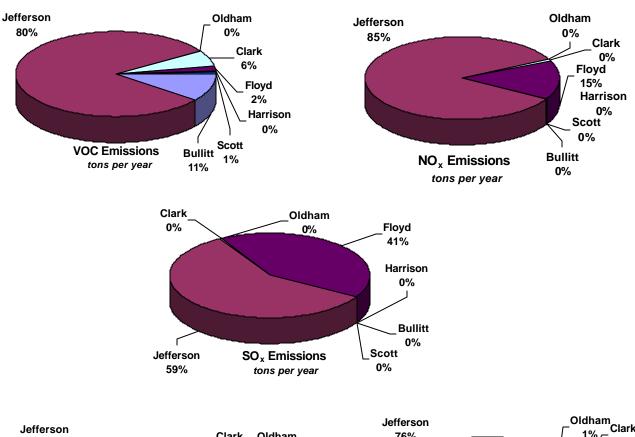
Point source VOC emissions from Bullitt County were estimated at 2,510 tons per year in 1999, which represents approximately 11% of the total 23,548 tpy of the overall VOC point source emissions from the Louisville MSA. Point source NO_x emissions from Bullitt County were estimated at 89 tpy in 1999, which represents less than 0.5% of the total 45,440 tpy of the overall NO_x point source emissions from the Louisville MSA. (See table 1-D)

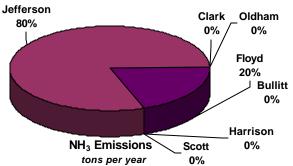
Point source SO_x emissions from Bullitt County were estimated at 140 tons per year in 1999, which represents less than 1% of the total of 120,688 tpy of the overall SO_x point source emissions from the Louisville MSA. (See table 1-E)

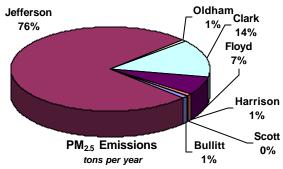
Point source NH₃ emissions from Bullitt County were estimated at 0 tpy in 1999 (See table 1-F)

Point source $PM_{2.5}$ emissions from Bullitt County were estimated at 26 tons per year in 1999, which represents approximately 1% of the total 3,272 tpy of the overall $PM_{2.5}$ point source emissions from the Louisville MSA. (See table 1-G)

1999 NEI Louisville MSA Point Source Emissions (tons per year)







Point sources located within Bullitt County are subject to PSD requirements, CTG RACT requirements, Maximum Achievable Control Technology (MACT) requirements for sources of Hazardous Air Pollutants, and New Source Performance Standards (NSPS).

Onroad Mobile

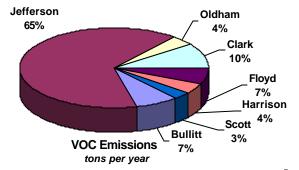
Onroad mobile source VOC emissions from Bullitt County were estimated at 1,668 tons per year (tpy) in 1999, which represents approximately 7% of the total 23,130 tpy of the overall VOC onroad mobile source emissions from the Louisville MSA. Onroad mobile source NO_x emissions from Bullitt County were estimated at 3,029 tpy in 1999, which represents approximately 8% of the total 36,037 tpy of the overall NO_x onroad mobile source emissions from the Louisville MSA. (See table 1-D)

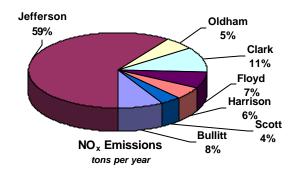
Onroad mobile source SO_x emissions from Bullitt County were estimated at 109 tons per year in 1999, which represents approximately 8% of the total 1,400 tpy of the overall SO_x onroad mobile source emissions from the Louisville MSA. (See table 1-E)

Onroad mobile source NH_3 emissions from Bullitt County were estimated at 83 tpy in 1999, which represents approximately 7% of the total 1,202 tpy of the overall NH_3 onroad mobile source emissions from the Louisville MSA. (See table 1-F)

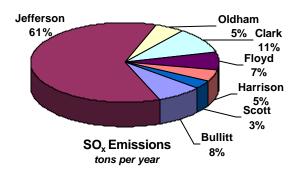
Onroad mobile source $PM_{2.5}$ emissions from Bullitt County were estimated at 69 tons per year (tpy) in 1999, which represents approximately 9% of the total 779 tpy of the overall $PM_{2.5}$ onroad mobile source emissions from the Louisville MSA. (See table 1-G)

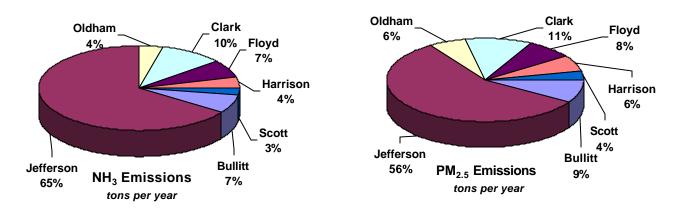
1999 NEI Louisville MSA Onroad Mobile Source Emissions (tons per year)





1999 NEI Louisville MSA Onroad Mobile Source Emissions (continued)





Based on information obtained from the Kentucky Transportation Cabinet, commuting traffic from other counties into Bullitt County is 33.3% and classified as high. The commuting traffic from Bullitt County into other counties is significant at 72.5%.

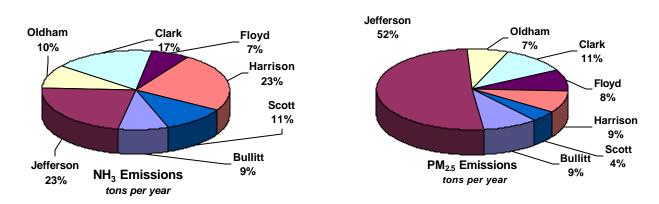
Commuting Classifications			
Not Significant	0-10%		
Minimal	11-30%		
High	31-50%		
Significant	51% or more		

Area Sources

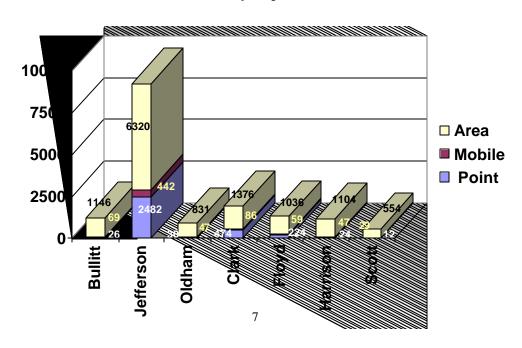
Area source NH₃ emissions from Bullitt County were estimated at 310 tpy in 1999, which represents approximately 9% of the total 3,558 tpy of overall NH₃ area source emissions from the Louisville MSA. (See Table 1-F)

Area source $PM_{2.5}$ emissions from Bullitt County were estimated at 1,146 tpy in 1999, which represents approximately 9% of the total 12,367 tpy of overall $PM_{2.5}$ area source emissions from the Louisville MSA. (See table 1-G)

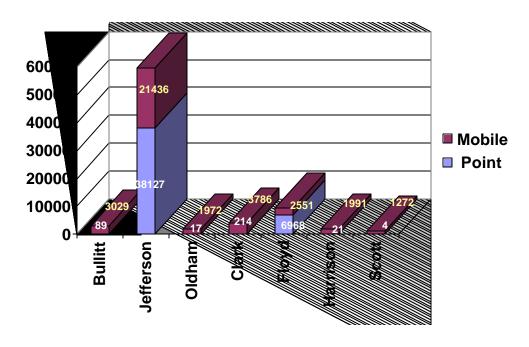
1999 NEI Louisville MSA Area Source Emissions (tons per year)



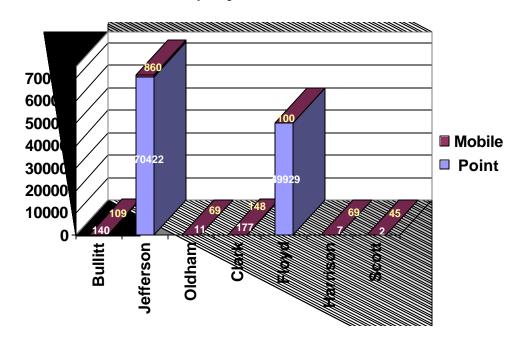
1999 NEI VOC Contribution (tons per year)



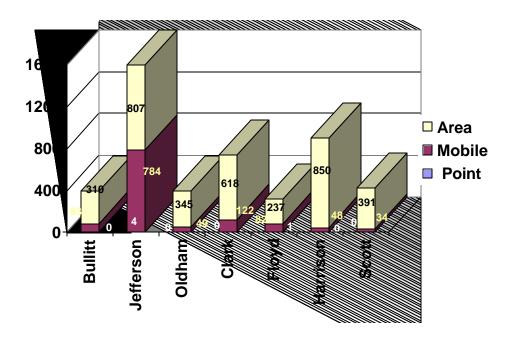
1999 NEI NO_x Contribution (tons per year)



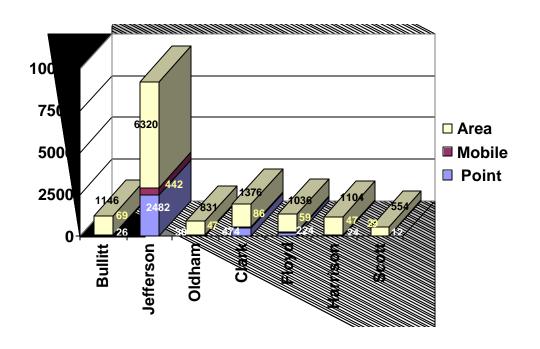
1999 NEI SO_x Contribution (tons per year)



1999 NEI NH₃ Contribution (tons per year)



1999 NEI PM_{2.5} Contribution (tons per year)



Conclusion and Recommendation

Bullitt County, based on 2001 – 2003 $PM_{2.5}$ monitoring and emissions data, is meeting the annual $PM_{2.5}$ standard with an annual average design value of 14.9 micrograms per cubic meter.

Bullitt County contributes approximately 9% of total VOC emissions, 4% of total NOx emissions, 8% of the total $PM_{2.5}$ emissions, approximately 8% of the total NH_3 emissions, and less than 0.5% of the total SO_x emissions in the Louisville MSA.

The monitoring and emissions data and other documentation presented indicate that Bullitt County, Kentucky, does not contribute a significant amount of $PM_{2.5}$ or emissions that contribute to $PM_{2.5}$ formation in the Louisville MSA.

Therefore, Bullitt County should be designated attainment for the $PM_{2.5}$ standard.

OLDHAM COUNTY, KENTUCKY

Oldham County is part of the Louisville, Kentucky-Indiana Metropolitan Statistical Area (MSA) and is on the L71 North-South interstate corridor. It is located to the northwest of Jefferson County, to the southwest of Trimble County, to the east of Henry County, and to the northwest of Shelby County. It is also to the southeast of Clark County, Indiana.

Geography/Topography

Oldham County has a land area of 189 square miles and is the eastern-most county in the entire MSA. The Ohio River forms the northwestern boundary of the county. The county geographically is in the Outer Bluegrass Region.

Meteorological Information

Wind speed/wind direction information shows that the majority of the time for the period 1988-1992, the wind in the Oldham County area came from the south southwest and typically at 7-10 knots. (See figure 1-A) The mean high temperature for July for the area from 1961 through 1990 was 87?F and the mean low was 70?F. The mean precipitation for the same period was 4.3 inches.

Planning

The authority for air quality planning in the Oldham County area resides with the Kentucky Environmental Public Protection Cabinet. Transportation planning for Oldham County is performed by the Kentuckiana Regional Planning and Development Agency (KIPDA) and the Kentucky Transportation Cabinet.

Air Monitoring

For the 2001 - 2003 monitoring period, there were no $PM_{2.5}$ monitors located in Oldham County. The Bullitt County $PM_{2.5}$ monitor to the south shows an average annual design value in attainment of the $PM_{2.5}$ annual National Ambient Air Quality Standards (NAAQS)) (15 micrograms per cubic meter). However, because $PM_{2.5}$ monitors in Jefferson County, Kentucky, and Clark and Floyd Counties in Indiana have a probable $PM_{2.5}$ design value exceeding the annual $PM_{2.5}$ standard, information for Oldham County is being presented in this document. The monitoring information for 2003 is complete for Bullitt County, Kentucky. However, the 2003 monitoring data reported for Jefferson County,

Kentucky, and the Indiana counties is the latest available and is not complete through December 2003. (See table 1-A)

Population

Based on projections to 2002 from the 2000 census data, there are 49,310 persons living in Oldham County. (See table 1-C) That represents approximately 261 persons per square mile. The population of Oldham County is approximately 34.8% rural with 65.2% of the people living in incorporated areas. The largest city in Oldham County is LaGrange.

Oldham County's population from 1990 through 2000 increased by approximately 65.2% (33,263 to 46,178). The population is further expected to increase by an additional 36.0% between 2000 and 2010. (See table 1-B)

Based on 2002 population data for the entire Louisville, KY-IN MSA, Oldham County represents approximately 4.7% of the total 2002 population in the entire MSA and 6.1% of the Kentucky portion of the MSA. (See table 1-C)

Air Emissions

The emissions presented in this document are from the U.S. EPA's 1999 National Emission Inventory (NEI). In addition, the $PM_{2.5}$ emissions provided in this document are for primary $PM_{2.5}$ from the 1999 NEI. Primary $PM_{2.5}$ is directly emitted from a stack or an open source and includes filterable and condensible particles.

Point Source

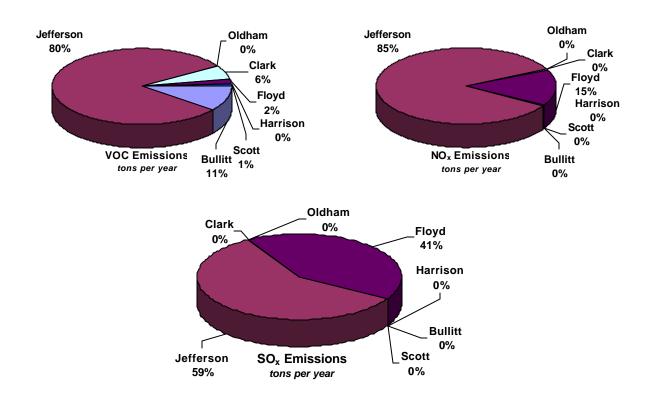
Point source VOC emissions from Oldham County were estimated at 55 tons per year in 1999, which represents less than 1% of the total 23,548 tpy of the overall VOC point source emissions from the Louisville MSA. Point source NO $_{\rm x}$ emissions from Oldham County were estimated at 17 tpy in 1999, which represents less than 1% of the total 45,440 tpy of the overall NO $_{\rm x}$ point source emissions from the Louisville MSA. (See table 1-D)

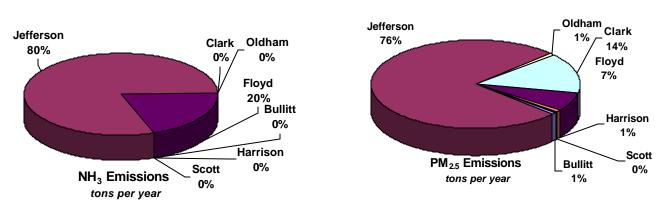
Point source SO_x emissions from Oldham County were estimated at 11 tons per year in 1999, which represents less than 1% of the total of 120,688 tpy of the overall SO_x point source emissions from the Louisville MSA. (See table 1-E)

Point source NH₃ emissions from Oldham County were estimated at 0 in 1999. (See table 1-F)

Point source $PM_{2.5}$ emissions from Oldham County were estimated at 30 tons per year in 1999, which represents approximately 1% of the total 3,272 tpy of the overall $PM_{2.5}$ point source emissions from the Louisville MSA. (See table 1-G)

1999 NEI Louisville MSA Point Source Emissions (tons per year)





Point sources located within Oldham County are subject to PSD requirements, CTG RACT requirements, Maximum Achievable Control Technology (MACT) requirements for sources of Hazardous Air Pollutants, and New Source Performance Standards (NSPS).

Onroad Mobile

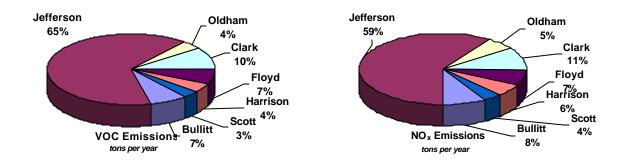
Onroad mobile source VOC emissions from Oldham County were estimated at 957 tons per year in 1999, which represents approximately 4% of the total 23,130 tpy of the overall VOC onroad mobile source emissions from the Louisville MSA. Onroad mobile source NO_x emissions from Oldham County were estimated at 1,972 tpy in 1999, which represents approximately 5% of the total 36,037 tpy of the overall NO_x onroad mobile source emissions from the Louisville MSA. (See table 1-D)

Onroad mobile source SO_x emissions from Oldham County were estimated at 69 tons per year in 1999, which represents approximately 5% of the total 1,400 tpy of the overall SO_x onroad mobile source emissions from the Louisville MSA. (See table 1-E)

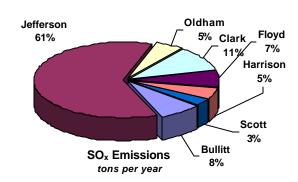
Onroad mobile source NH_3 emissions from Oldham County were estimated at 49 tpy in 1999, which represents approximately 4% of the total 1,202 tpy of the overall NH_3 onroad mobile source emissions from the Louisville MSA. (See table 1-F)

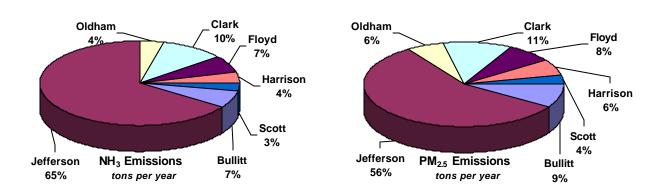
Onroad mobile source $PM_{2.5}$ emissions from Oldham County were estimated at 47 tons per year in 1999, which represents approximately 6% of the total 779 tpy of the overall $PM_{2.5}$ onroad mobile source emissions from the Louisville MSA. (See table 1-G)

1999 NEI Louisville MSA Onroad Mobile Source Emissions (tons per year)



1999 NEI Louisville MSA Onroad Mobile Source Emissions (continued)





Based on information obtained from the Kentucky Transportation Cabinet, commuting traffic from other counties into Oldham County is 45.7% and classified as high. The commuting traffic from Oldham County into other counties is significant at 66.8%.

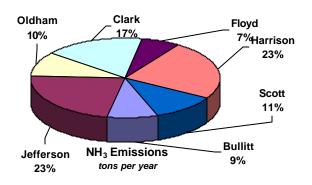
Commuting Classifications			
Not Significant	0-10%		
Minimal	11-30%		
High	31-50%		
Significant	51% or more		

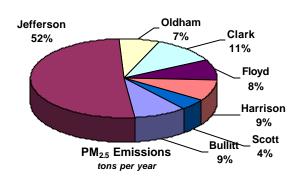
Area Sources

Area source NH_3 emissions from Oldham County were estimated at 345 tpy in 1999, which represents approximately 10% of the total 3,558 tpy of overall NH_3 area source emissions from the Louisville MSA. (See table 1-F)

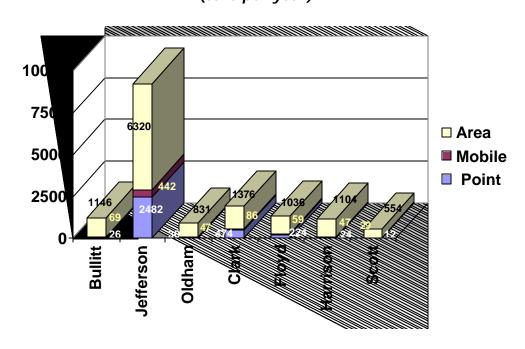
Area source $PM_{2.5}$ emissions from Oldham County were estimated at 831 tpy in 1999, which represents approximately 7% of the total 12,367 tpy of overall $PM_{2.5}$ area source emissions from the Louisville MSA. (See table 1-G)

1999 NEI Louisville MSA Area Source Emissions (tons per year)

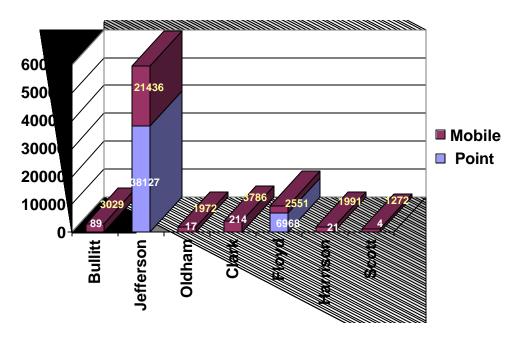




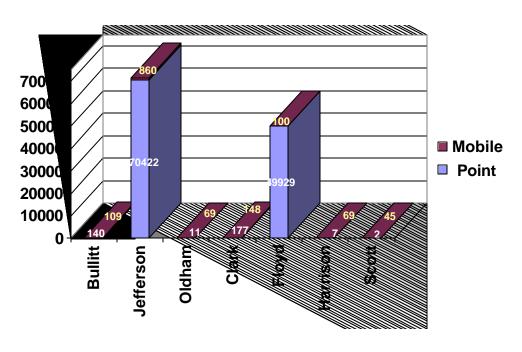
1999 NEI VOC Contribution (tons per year)



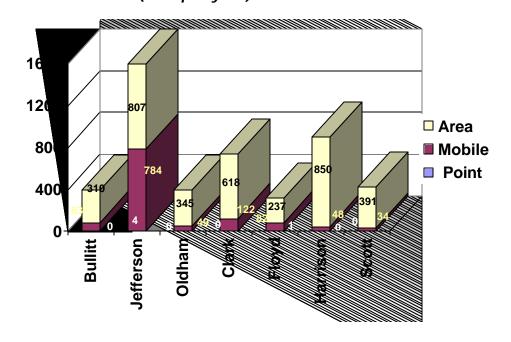
1999 NEI NO_x Contribution (tons per year)



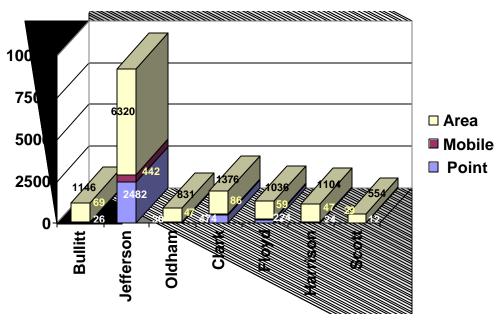
1999 NEI SO_x Contribution (tons per year)



1999 NEI NH₃ Contribution (tons per year)



1999 NEI PM_{2.5} Contribution (tons per year)



Conclusion and Recommendation

For the 2001 – 2003 monitoring period, there were no $PM_{2.5}$ monitors located in Oldham County.

The emissions data and other documentation presented indicate that Oldham County, Kentucky, does not contribute a significant amount of $PM_{2.5}$ or emissions that contribute to $PM_{2.5}$ formation in the Louisville MSA. Oldham County contributes approximately 2% of both VOC and NOx emissions, 6% of the total $PM_{2.5}$ emissions, approximately 8% of the total NH_3 emissions, and less than 0.5% of the total SO_x emissions in the Louisville MSA.

Predominant wind patterns are away from Jefferson County and would have the small amount of emissions from Oldham County being transported away from monitors with violations.

Therefore, Oldham County should be designated attainment for the $PM_{2.5}$ standard.

JEFFERSON COUNTY, KENTUCKY

Jefferson County is part of the Louisville, Kentucky-Indiana Metropolitan Statistical Area (MSA) and is located at the intersection of the I-65 North-South, I-71 North-South, and I-64 East-West interstate corridors in central Kentucky.

Geography/Topography

Jefferson County has a land area of 385 square miles and is the central county in the Kentucky portion of the Louisville MSA. The Ohio River forms the northern border of Jefferson County. It is located to the southeast of Oldham, to the east of Shelby County, to the northwest of Spencer County, and to the north of Bullitt County. It is also to the south of Clark County, Indiana, to the southeast of Floyd County, Indiana, and to the east of Harrison County, Indiana.

Meteorological Information

Wind speed/wind direction information shows that the majority of the time for the period 1988-1992, the wind in the Jefferson County area came from the south southwest and typically at 7-10 knots. (See figure 1-A) The mean high temperature for July for the area from 1961 through 1990 was 87?F and the mean low was 70F. The mean precipitation for the same period was 4.3 inches.

Planning

The authority for air quality planning in the Jefferson County resides with the Louisville Metro Air Pollution Control District, while the Kentucky Environmental and Public Cabinet provides oversight. Transportation planning for Jefferson County is performed by the Kentuckiana Regional Planning and Development Agency (KIPDA).

Air Monitoring

For the 2001 - 2003 monitoring period, all four Jefferson County $PM_{2.5}$ monitors shows an probable exceedence of the average annual design value, which would classify Jefferson County as nonattainment for the $PM_{2.5}$ annual National Ambient Air Quality Standards (NAAQS) (15 micrograms per cubic meter). In addition, probable exceedences on Clark and Floyd Counties in Indiana have

been recorded. The monitoring information for 2003 is complete for Bullitt County, Kentucky, which is meeting the $PM_{2.5}$ annual standard. However, the 2003 monitoring data reported for Jefferson County, Kentucky, and the Indiana counties of Clark and Floyd is the latest available and may not be complete through December 2003. (See table 1-A)

Population

Based on projections to 2002 from the 2000 census data, there are 698,080 persons living in Jefferson County. (See table 1-C) That represents approximately 1813 persons per square mile. The population of Jefferson County is approximately 1.9% rural with 98.2% of the people living in incorporated areas. The largest city in Jefferson County is Louisville.

Jefferson County's population from 1990 through 2000 increased by approximately 4.3% (665,123 to 693,604). The population is further expected to increase by an additional 3.4% between 2000 and 2010. (See table 1-B)

Based on 2002 population data for the entire Louisville, KY-IN MSA, Jefferson County represents approximately 67.1% of the total 2002 population in the entire MSA and 86.1% of the Kentucky portion of the MSA. (See table 1-C)

Air Emissions

The emissions presented in this document are from the U.S. EPA's 1999 National Emission Inventory (NEI). In addition, the $PM_{2.5}$ emissions provided in this document are for primary $PM_{2.5}$ from the 1999 NEI. Primary $PM_{2.5}$, is directly emitted from a stack or open source and includes filterable and condensable particles.

Point Sources

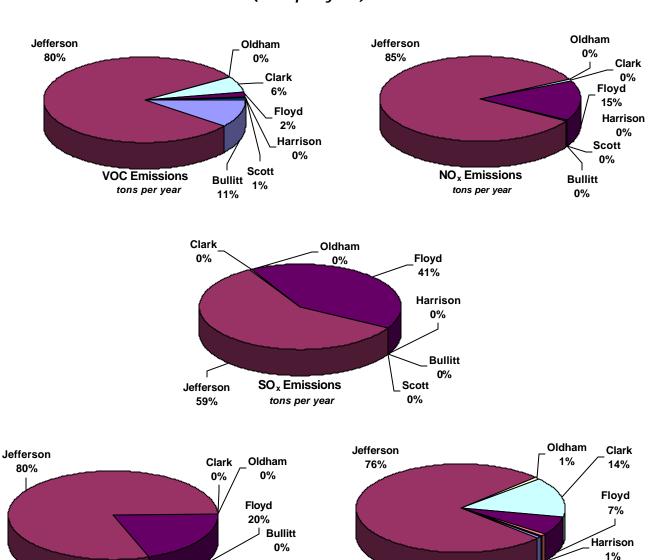
Point source VOC emissions from Jefferson County were estimated at 18,887 tons per year in 1999, which represents approximately 80% of the total 23,548 tpy of the overall VOC point source emissions from the Louisville MSA. Point source NO_x emissions from Jefferson County were estimated at 38,127 tpy in 1999, which represents approximately 85% of the total 45,440 tpy of the overall NO_x point source emissions from the Louisville MSA. (See table 1-D)

Point source SO_x emissions from Jefferson County were estimated at 70,422 tons per year in 1999, which represents approximately 59% of the total of 120,688 tpy of the overall SO_x point source emissions from the Louisville MSA. (See table 1-E)

Point source NH_3 emissions from Jefferson County were estimated at 4 tpy in 1999, which represents 80% of the total 5 tpy of the overall NH_3 point source emissions from the Louisville MSA. (See table 1-F)

Point source $PM_{2.5}$ emissions from Jefferson County were estimated at 2,482 tons per year in 1999, which represents approximately 76% of the total 3,272 tpy of the overall $PM_{2.5}$ point source emissions from the Louisville MSA. (See table 1-G)

1999 NEI Louisville MSA Point Source Emissions (tons per year)



Harrison

0%

Scott

0%

NH₃ Emissions

tons per year

Scott

0%

Bullitt

1%

PM_{2.5} Emissions

tons per year

Point sources located within Jefferson County are subject to PSD requirements, CTG RACT requirements, Maximum Achievable Control Technology (MACT) requirements for sources of Hazardous Air Pollutants, and New Source Performance Standards (NSPS), and any additional local emission control measures.

Onroad Mobile

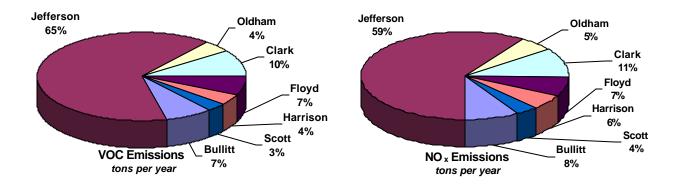
Onroad mobile source VOC emissions from Jefferson County were estimated at 14,981 tons per year in 1999, which represents approximately 65% of the total 23,130 tpy of the overall VOC onroad mobile source emissions from the Louisville MSA. Onroad mobile source NO $_{\rm x}$ emissions from Jefferson County were estimated at 21,436 tpy in 1999, which represents approximately 59% of the total 36,037 tpy of the overall NO $_{\rm x}$ onroad mobile source emissions from the Louisville MSA. (See table 1-D)

Onroad mobile source SO_x emissions from Jefferson County were estimated at 860 tons per year in 1999, which represents approximately 61% of the total 1,400 tpy of the overall SO_x onroad mobile source emissions from the Louisville MSA. (See table 1-E)

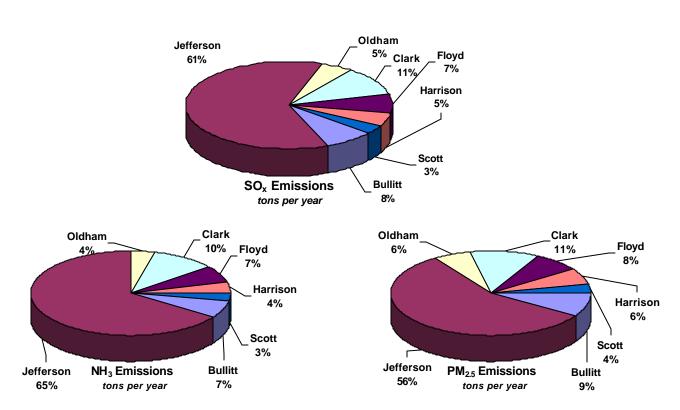
Onroad mobile source NH_3 emissions from Jefferson County were estimated at 784 tpy in 1999, which represents approximately 65% of the total 1,202 tpy of the overall NH_3 onroad mobile source emissions from the Louisville MSA. (See table 1-F)

Onroad mobile source $PM_{2.5}$ emissions from Jefferson County were estimated at 442 tons per year (tpy) in 1999, which represents approximately 56% of the total 779 tpy of the overall $PM_{2.5}$ onroad mobile source emissions from the Louisville MSA. (See table 1-G)

1999 NEI Louisville MSA Onroad Mobile Source Emissions (tons per year)



1999 NEI Louisville MSA Onroad Mobile Source Emissions (continued)



Based on information obtained from the Kentucky Transportation Cabinet, commuting traffic from other counties into Jefferson County is 24.9% and classified as minimal. The commuting traffic from Jefferson County into other counties is not significant at 7.7%.

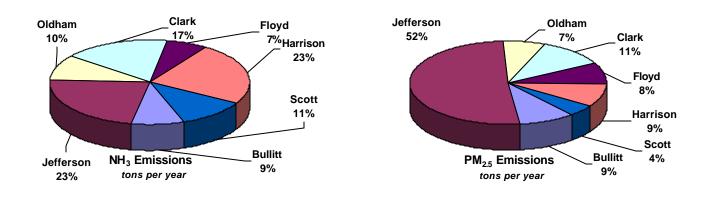
Commuting Classifications			
Not Significant	0-10%		
Minimal	11-30%		
High	31-50%		
Significant	51% or more		

Area Sources

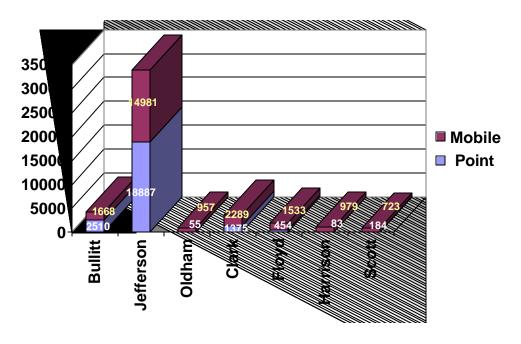
Area source NH₃ emissions from Jefferson County were estimated at 807 tpy in 1999, which represents approximately 23% of the total 3,558 tpy of overall NH₃ area source emissions from the Louisville MSA. (See table 1-E)

Area source $PM_{2.5}$ emissions from Jefferson County were estimated at 6,320 tpy in 1999, which represents approximately 52% of the total 12,367 tpy of overall $PM_{2.5}$ area source emissions from the Louisville MSA. (See table 1-G)

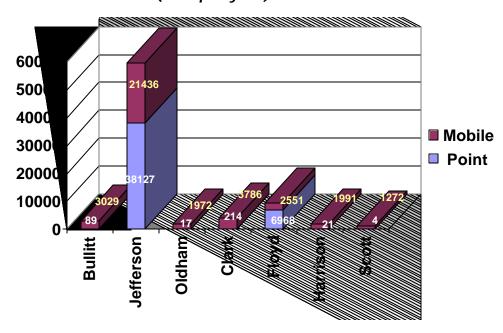
1999 NEI Louisville MSA Area Source Emissions (tons per year)



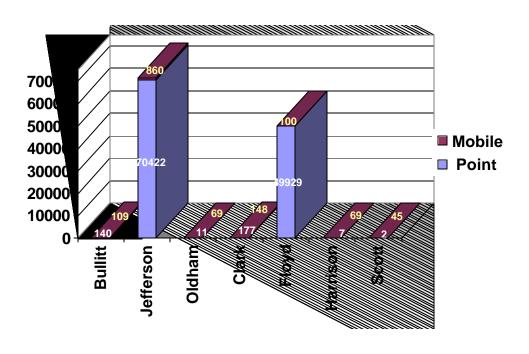
1999 NEI VOC Contribution (tons per year)



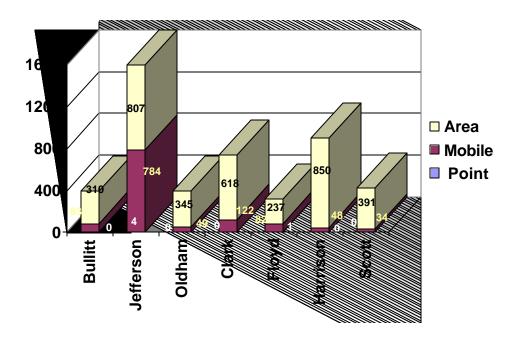
1999 NEI NO_x Contribution (tons per year)



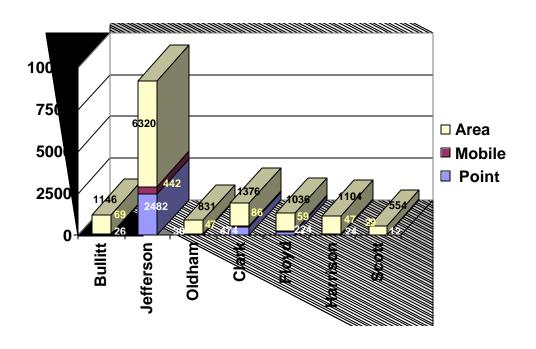
1999 NEI SO_x Contribution (tons per year)



1999 NEI NH₃ Contribution (tons per year)



1999 NEI PM_{2.5} Contribution (tons per year)



Conclusion and Recommendation

Jefferson County, based on 2001 – 2003 $PM_{2.5}$ monitoring data, is not meeting the annual $PM_{2.5}$ standard with an annual design value of 17.3 micrograms per cubic meter (monitor located at 37^{th} and Southern), representing the monitor with the highest design value in the county.

The monitoring and emissions data and other documentation presented indicate that Jefferson County, Kentucky, does contribute a significant amount of PM_{2.5} or emissions that contribute to PM_{2.5} formation in the Louisville MSA.

Jefferson County contributes approximately 73% of the total VOC emissions, 73% of the total NOx emissions, 56% of the total $PM_{2.5}$ emissions, 33% of the total NH_3 emissions, and 58% of the total SO_x emissions in the Louisville MSA.

Therefore, Jefferson County should be designated nonattainment for the PM_{2.5} standard.

Louisville, KY-IN MSA Figure 1-A Wind Rose Patterns

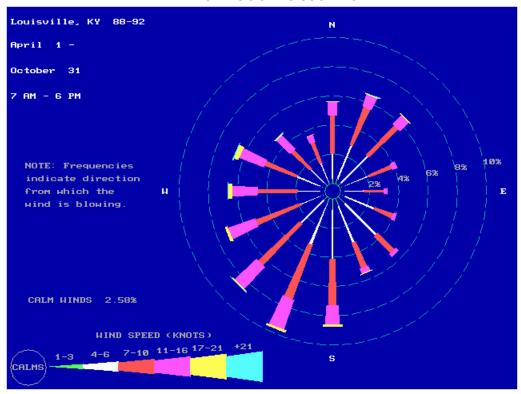


Figure 1-B 1999 NEI Louisville MSA VOC and NO_x Emissions (tons per year)

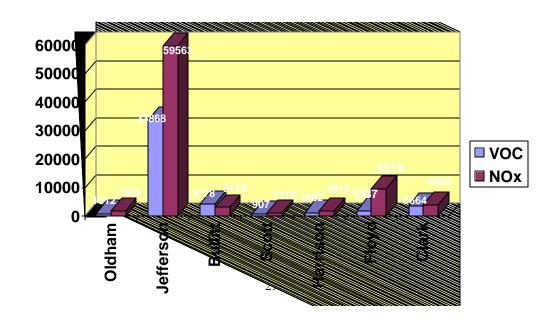


Figure 1-C 1999 NEI Louisville MSA SO_x Emissions (tons per year)

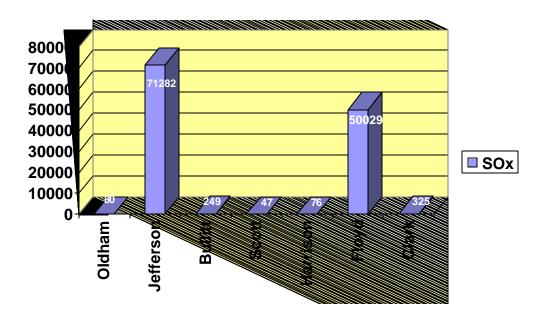


Figure 1-D 1999 NEI Louisville MSA NH₃ and PM_{2.5} Emissions (tons per year)

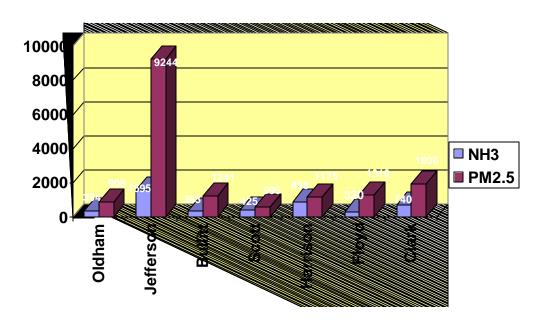


Table 1-A
Louisville, KY-IN MSA
Average Annual Design Values for PM_{2.5}
(micrograms per cubic meter thru October 2003)

County	2001	2002	2003*	Design Value
Kentucky				
Jefferson				
37 th & Southern	18.7	17.2	16.1	17.3
Barret	16.9	16.4	15.7	16.3
Beecher	17.7	17.5	15.5	16.9
Watson	16.3	15.7	15.2	15.7
Bullitt	15.6	14.7	14.4	14.9
Oldham				N/A
Indiana				
Clark	16.9	16.0	17.0	16.6
Floyd	15.8	14.6	15.5	15.3

^{*}The monitoring information for 2003 is complete for Bullitt County, Kentucky. However, the 2003 monitoring data reported for Jefferson County, Kentucky, and the Indiana counties is the latest available and may not be complete through December 2003.

Table 1-B
Kentucky Portion of the Louisville, KY-IN MSA
Population Growth Data

County	1990	2000	%Growth 1990 - 2000	2010	%Growth 2000 - 2010
Bullitt	47,567	61,236	28.7%	77,928	27.3%
Jefferson	665,123	693,604	4.3%	717,376	3.4%
Oldham	33,263	46,178	38.8%	62,789	36.0%

Table 1-C 2002 Estimated Louisville, KY-IN MSA Population **Growth Data**

Kentucky	Estimated Population	% of Total
Bullitt	63,800	6%
Jefferson	698,080	67%
Oldham	49,310	5%
Indiana		
Clark	98,198	10%
Floyd	71,633	7%
Harrison	35,244	3%
Scott	23,334	2%
Total Estimated Population	1,039,599	

Table 1-D 1999 NEI Louisville MSA VOC and NO_x Emissions (tons per year)

County		VOC			NO _x		
oddiity	Point	Mobile	Total	Point	Mobile	Total	
Clark	1,375	2,289	3,664	214	3,786	4,000	
Floyd	454	1,533	1,987	6,968	2,551	9,519	
Harrison	83	979	1,062	21	1,991	2,012	
Scott	184	723	907	4	1,272	1,276	
Bullitt	2,510	1,668	4,178	89	3,029	3,118	
Jefferson	18,887	14,981	33,868	38,127	21,436	59,563	
Oldham	55	957	1,012	17	1,972	1,989	
Total Emissions	23,548	23,130	46,678	45,440	36,037	81,477	

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Table 1-E 1999 NEI Louisville MSA SO_x Emissions

(tons per year)

County	SO _x				
County	Point	Mobile	Total		
Clark	177	148	325		
Floyd	49,929	100	50,029		
Harrison	7	69	76		
Scott	2	45	47		
Bullitt	140	109	249		
Jefferson	70,422	860	71,282		
Oldham	11	69	80		
Total Emissions	120,688	1,400	122,088		

Table 1-F 1999 NEI Louisville MSA NH₃ Emissions

(tons per year)

County	NH₃				
oddiity	Area Point		Mobile	Total	
Clark	618	0	122	740	
Floyd	237	1	82	320	
Harrison	850	0	48	898	
Scott	391	0	34	425	
Bullitt	310	0	83	393	
Jefferson	807	4	784	1,595	
Oldham	345	0	49	394	
Total Emissions	3,558	5	1,202	4,765	

Table 1-G 1999 NEI Louisville MSA PM_{2.5} Emissions (tons per year)

County	PM _{2.5}				
County	Area	Point	Mobile	Total	
Clark	1,376	474	86	1,936	
Floyd	1,036	224	59	1,319	
Harrison	1,104	24	47	1,175	
Scott	554	12	29	595	
Bullitt	1,146	26	69	1,241	
Jefferson	6,320	2,482	442	9,244	
Oldham	831	30	47	908	
Total Emissions	12,367	3,272	779	16,418	